

ABSTRACT

5 The present invention provides a titanium-made plate-type heat  
exchanger comprising first-fluid flow paths and second-fluid flow paths  
arranged alternately, which is formed by joining titanium-made constituting  
members, wherein: a titanium-zirconium based brazing solder containing 20  
to 40 wt.% of titanium and 20 to 40 wt.% of zirconium, which melts under  
880°C, is coated over positions to be connected of the constituting members,  
10 and brazing solder coated constituting members are heated under 880°C in an  
vacuum and/or inert gas atmosphere. The present invention also provides a  
production method of the heat exchanger, which can prevent titanium-made  
constituting members of the heat exchanger from being deteriorated due to  
over-heating.